

BASS HARBOR

MAINE

SURVEY

(REVIEW OF REPORTS)

U. S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
WALTHAM, MASS.

U. S. ARMY ENGINEER DIVISION, NEW ENGLAND
CORPS OF ENGINEERS
424 Trapelo Road
Waltham 54, Mass.

NEDGW

8 August 1962

SUBJECT: Survey (Review of Reports) Bass Harbor,
Tremont, Maine

TO: Chief of Engineers
ATTN: ENGOW-P
Department of the Army
Washington 25, D. C.

SYLLABUS

The Division Engineer finds that the improvement of navigation facilities for the commercial fishing fleet at Bass Harbor, Maine, as desired by local interests, is warranted and can be accomplished under the authority of Section 107 of the River and Harbor Act of 1960. On the basis of a report submitted 28 March 1962 to the Chief of Engineers, the improvement was duly authorized by the Chief of Engineers under the above-cited authority by 1st Indorsement dated 7 May 1962. No further improvement in addition to that so authorized is warranted at this time.

1. Authority. - This report is submitted in compliance with an item contained in the River and Harbor Act of 1950 which directed that "a preliminary examination and survey be made at Bass Harbor, Maine."

2. Based on a favorable preliminary examination report submitted to the Chief of Engineers, 31 January 1957, a study of survey scope was assigned to the New England Division by letter of the Chief of Engineers, dated 5 March 1957.

3. Purpose and Description. - This study considered the engineering and economic justification of navigation improvements for the permanent and transient commercial fishing fleets using facilities in Bass Harbor. Bass Harbor is located on the southwest side of Mount Desert Island about 100 miles by water northeast of Portland, Maine. The harbor consists of an outer bay and an inner cove.

The outer bay, roughly rectangular in shape about 1,500 yards wide at the entrance, has depths ranging from 30 to 46 feet at mean low water and does not present any navigation difficulties. The fairly well protected inner cove is a long narrow inlet extending northward from the head of the outer bay with a total area of 200 acres, about 75 percent of which is bare at low water. There is a total of approximately 30 acres of water area having depths ranging from 6 to 10 feet. A winding natural channel buoyed at the entrance to the cove and varying in width from 100 to 300 feet with depths of 26 to 6 feet, extends northward through the inner cove between steep banks and shoals. The mean range of tide is 9.9 feet. The fishing villages of McKinley and Bernard, in the Town of Tremont, border the harbor on the east and west sides respectively. The principal commercial activities at Bass Harbor are fish and fish products, shellfish, canning, and facilities for the repair of boats and the supply of marine equipment. Two large wharves on the east side of the inner cove near the entrance and several smaller wharves along the west side, serve as terminal and transfer facilities for about 70 home-based and 200 transient lobster, carrier, dragger, and seiner boats as well as small gasoline tankers. There are only a few recreational boats using the harbor. The primary navigation difficulties encountered by these craft are insufficient mooring space of adequate depth and insufficient depth for access to the wharves and terminals in the inner cove.

4. There is no Federal project for Bass Harbor proper nor any prior reports on this harbor. A Federal project does exist for Bass Harbor Bar which extends southward from Bass Harbor Head to Great Gott Island on the east side of the entrance to Bass Harbor outer bay. This project, authorized by the River and Harbor Act of 4 March 1913 and completed during the same year, provides for a channel 250 feet wide and 14 feet deep across the bar a short distance south of Bass Harbor Head. This improvement affords a short cut for coastwise vessels skirting the southern shore of Mount Desert Island and does not otherwise affect the improvement desired at Bass Harbor. Federal costs to date total \$7,494 of which \$4,076 has been expended for new work and \$3,418 for maintenance, last performed in 1920. No local cooperation was required for the existing project at Bass Harbor Bar. Except for the provision of landings, which are privately owned but open to public use, no improvements for the benefit of general navigation have been made by local interests.

5. Desired Improvements. - At a public hearing held at Tremont Town Hall, Bernard, Maine, on 29 August 1956, local interests requested an anchorage of adequate depth and size to provide for the permanent and transient fishing fleets using the harbor. Local interests outlined a plan for dredging the inner cove to depths of 6 and 10 feet

for the full width from the entrance to Sawyer's Island to the north, approximately 125 acres. They also expressed a desire for the construction of a bulkhead on the east side of the harbor as shown on the map accompanying this report.

6. Plan of Improvement and Project Formulation. - Consideration given to the extensive plan of improvement desired by local interests indicated that it was far in excess of the anchorage area needed for present and prospective navigation. The plan of improvement finally determined as most nearly accomplishing the desired purpose in the most practical manner, without the need for rock removal, would provide an anchorage basin with a total area of 24 acres. This basin would consist of a) 6 acres of anchorage, 6 feet deep on the southwest side of the inner cove adjacent to the developed waterfront b) 8 acres of anchorage, 10 feet deep adjacent to and east of the 6 foot anchorage, and c) 10 acres of anchorage, 6 feet deep at the head of the inner cove.

7. It is expected that the proposed navigation improvement will result in an expansion of the permanent fishing fleet with attendant additional fish and lobster catches and an increase in the overall fishing industry of the harbor. Also, it is estimated that the improvement will reduce operating costs for a substantial part of the permanent and transient fishing fleets as a result of reduced tidal delays and provision of a closer landing point, respectively. In addition, some benefits are expected to accrue through alleviation of overcrowded mooring conditions and elimination of the grounding of anchored boats.

8. The total estimated first cost of construction for the proposed improvement is \$197,000, which includes \$12,000 for preauthorization studies and \$1,000 for additional aids to navigation. In view of the general nature of the expected benefits, the project cost would be borne by the Federal Government. Additional annual maintenance is estimated to be \$5,300 for dredging and \$100 for navigation aids. The benefit-cost ratio is 3.2 to 1.0.

9. Coordination and Local Cooperation. - All Federal, State, and local agencies having an interest in the improvement have been consulted concerning the effects of the proposed improvement on their activities. The U. S. Fish and Wildlife Service has reported that they would have no objection to disposal of project-related spoil material on the marshy depression about one-half mile northwest of Sawyers Island.

10. The State of Maine and the Town of Tremont have approved the improvement plan and have provided reasonable assurance that the following requirements of local cooperation and participation would be met for construction of the project under authority of Section 107 of the River and Harbor Act of 1960.

a. Assume full responsibility for all project costs in excess of the \$200,000 Corps of Engineers cost limitation under Section 107 of the 1960 River and Harbor Act, if found necessary to provide a complete project.

b. Provide, without cost to the United States, all necessary lands, easements, and rights-of-way, including suitably diked spoil disposal areas needed for the construction and maintenance of the project. Diking is estimated at \$5,000.

c. Hold and save the United States free from damages that may result from construction and maintenance of the project.

d. Provide and maintain, without cost to the United States, an adequate public landing adjacent to the upper anchorage, open to all on equal terms, and having a berthing depth commensurate with the adjacent 6-foot anchorage. Cost of the public landing is estimated at \$15,000.

e. Regulate the use, growth and free development of the harbor facilities with the understanding that said facilities will be open to all on equal terms.

11. Conclusions. - Local interests have accepted the improvement to provide an anchorage basin with a total area of 24 acres, as shown on the inclosed map, as meeting the present and reasonably prospective navigation needs at Bass Harbor. They have indicated a willingness and ability to meet the requirements of local cooperation.

12. Accordingly, the Chief of Engineers on 7 May 1962, under authority of Section 107 of the 1960 River and Harbor Act, approved for accomplishment the above-mentioned navigation improvement for Bass Harbor.

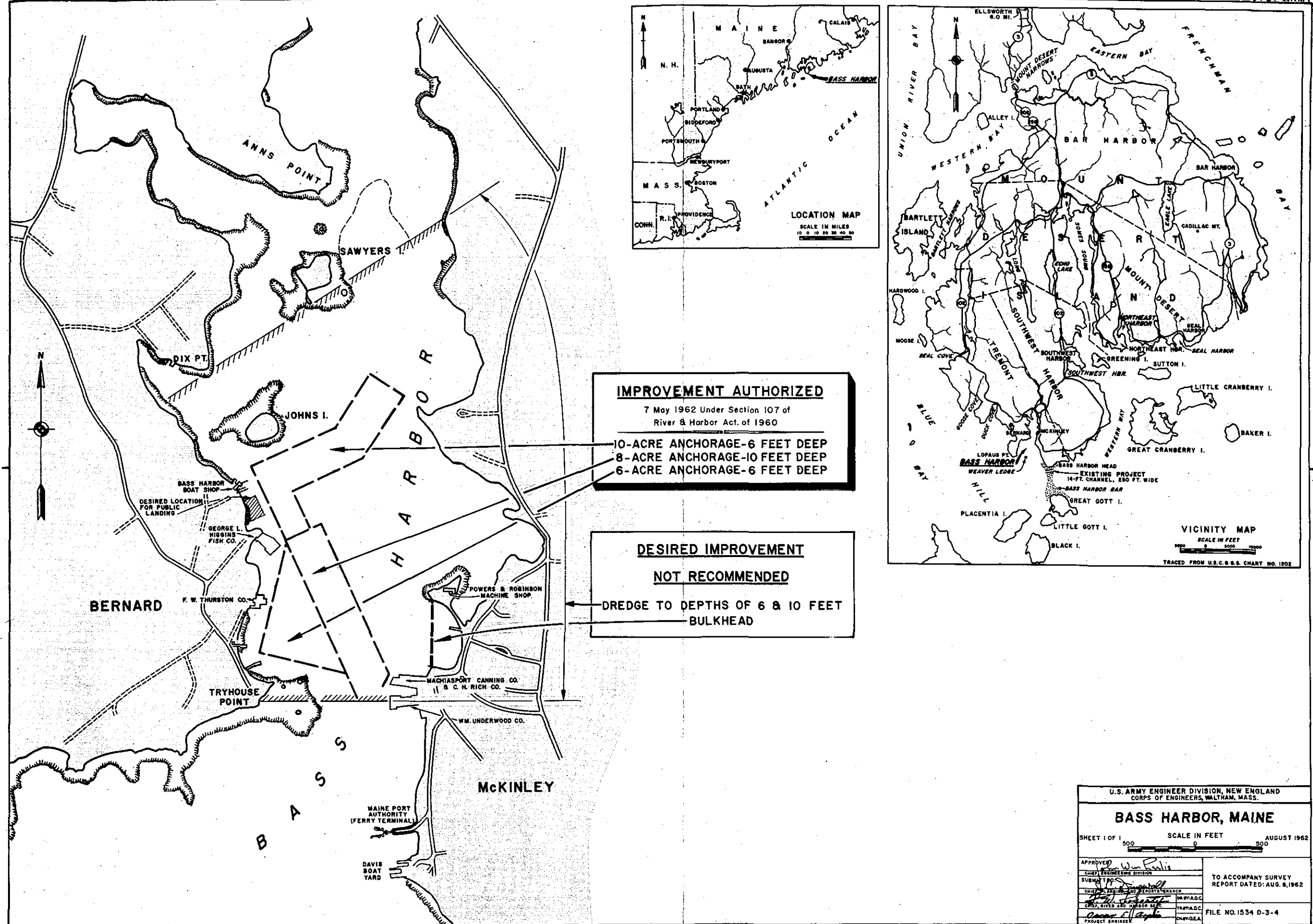
13. Recommendations. - The Division Engineer recommends that no further navigation improvement of Bass Harbor, Maine, be made at this time.

2 Incl

1. Map

2. Addl Info called
for by Sen Res 1148

SEYMOUR A. POTTER, JR.
Brigadier General, USA
Division Engineer



BASS HARBOR, MAINE

Information Called for by
Senate Resolution 1148, 85th Congress
Adopted 28 January 1958

1. This study considered the economic justification and engineering feasibility of navigation improvements for the commercial fishing fleet, present and prospective, at Bass Harbor, Tremont, Maine. The harbor is located on the southwest side of Mount Desert Island about 100 miles by water northeast of Portland, Maine.

2. As a result of the study the Chief of Engineers, under authority of Section 107 of the 1960 River and Harbor Act, authorized on 7 May 1962, a navigation improvement at Bass Harbor providing for a 24-acre anchorage basin consisting of 1) 6 acres of anchorage, 6 feet deep on the southwest side of the inner harbor adjacent to the developed waterfront 2) 8 acres of anchorage, 10 feet deep adjacent to and east of the 6-foot anchorage, and 3) 10 acres of anchorage, 6 feet deep at the head of the inner cove. The total estimated first cost for this improvement is \$197,000, which includes \$12,000 for preauthorization studies and \$1,000 for additional navigation aids. Future maintenance costs are estimated at \$5,300. In view of the general nature of the anticipated benefits the total project cost will be borne by the Federal Government. However, local interests will be required to assume responsibility for all costs in excess of \$200,000 if found necessary to provide a complete project; provide an adequate public landing, estimated to cost about \$15,000, open to all equally; and provide suitably diked spoil areas, diking cost estimated at \$5,000.

3. The selected plan of improvement was one of several plans considered for this harbor, and represents a substantial modification of the desired extensive improvement calling for dredging approximately 125 acres, which was estimated to be far in excess of the area needed for the present and prospective fleets. A bulkhead for containing proposed land fill as desired by local interests, to be located in the southeast part of the inner cove near the entrance as shown on the map accompanying this report, was considered and found not economically feasible and to be a local responsibility. Local interests have concurred in these findings.